178694

DISCLOSURE OF INFORMATION TO NCASI

As a result of an agreement between the Agency and NCASI, information gathered through this survey form can be made available to the NCASI if the mill chooses to do so. The following items are provided for you to indicate your mill's course of action in this matter: (It should be noted that the original of this survey form must be sent to the Agency's contractor and that a copy must be made if you choose to send information to the NCASI).

1. A completed copy of this survey, except for the deletions indicated below (is) (is not) being transmitted directly to the staff of the National Council of the Paper Industry for Air & Stream Improvement Inc. (NCASI).

   The following items of information or data were deleted from the copy of the survey transmitted to NCASI (items selected on the basis of a claim of confidentially, even as to NCASI, are indicated by an *):

   _____

   _____

   _____

   _____

2. The respondent (does) (does not) consent to the disclosure of any other information collected by EPA or its contractor concerning your facility, including any information or reference code needed to identify the facility (ies) covered by this survey from subsequent EPA contractor verification surveys or other studies.

   The following items or types of information or data subsequently collected by EPA or its contractor shall not be disclosed to NCASI.

   _____

   _____

   _____

   _____

NAME: _____ TITLE: _____

GLOSSARY OF TERMS

Wastewater is defined as any spent water which results from or has had contact with the manufacturing process. It includes any water for which there is a reasonable possibility of contamination from the storage, transportation, handling, processing, cleaning, and/or fire control. Cooling water is considered to be wastewater when it is contaminated by the process, as in the case of barometric condenser water.

A Direct Discharger is considered to be a mill, a manufacturing process, or an operation which releases treated or untreated process wastewater into navigable waterways, or the oceans.

The fact that a mill may release process wastewater into a ditch, culvert, pipe, stream bed, fissure, or similar conveyance located on mill property does not exclude the mill from being a direct discharger if the wastewater so released eventually enters navigable waters.

POTW is a publicly or privately owned treatment works.

An Indirect Discharger is considered to be a mill, a manufacturing process, or an operation which releases process wastewater, treated or untreated, to a publicly or privately owned treatment works (POTW), other than a mill's own wastewater treatment system.

A Self-Contained Discharger is considered to be a mill, a manufacturing process, or an operation which releases process wastewater, treated or untreated, to disposal by spreading on the land, to containment in evaporation ponds, to a deep aquifer by subsurface injection, to application on solid waste material which is subsequently burned or disposed of in a landfill, or other method which does not result in discharge to navigable waters, oceans, or a POTW.

Pretreatment is considered to be any treatment device external from the mill production processes which is utilized prior to discharge by an indirect discharger to a POTW.

Internal Control is considered to be any system added to the mill process to reduce raw waste flow, and/or pollutant load discharged from a mill which would not have been added were it not for effluent regulations.

Average Daily is equal to the total production for a year divided by the total number of production days for the year.

WASTEPAPER CATEGORIES

Mixed Wastepaper* is considered to consist of a mixture of various qualities of paper not limited as to type of packing or fiber content; or a baled mixture of various qualities of paper containing less than 25% of groundwood stock coated or uncoated; or a baled clean sorted mixture of various qualities of papers containing less than 10% of groundwood stock coated or uncoated.

Boxboard Cuttings* consists of baled new cuttings of paperboard such as are used in the manufacture of folding paper cartons, setup boxes and similar boxboard products.

No. 1 News* consists of baled newspapers containing less than 5% of other papers.

Special News* consists of baled sorted fresh newspapers, not sunburned, free from papers other than news, containing not more than the normal percentage of rotogravure and colored sections; of baled sorted, fresh, dry newspapers, not sunburned, free from magazines, white blank, pressroom over-issues, and paper other than news, containing not more than the normal percentage of rotogravure and colored sections. This packing must be free from tare; or of unused over-run regular newspapers printed on newsprint, baled or securely tied in bundles, containing not more than the normal percentage of rotogravure and colored sections.

Fibre Containers* consists of baled solid fibre containers having liners of either jute or kraft.

Corrugated* consists of baled corrugated containers having liners of either jute or kraft.

Corrugated Cuttings* consists of baled corrugated cuttings having two or more liners of either jute or kraft. Non-soluble adhesives, butt rolls, slabbed or hogged medium, and treated medium or liners are not acceptable in this grade; or of baled corrugated cuttings having all liners of kraft. Non-soluble adhesives, butt rolls, slabbed or hogged medium, and treated medium or liners are not acceptable in this grade; or of baled corrugated cuttings having all liners of kraft. The corrugated medium must be either semi-chemical or other similar uniform medium. Non-soluble adhesives, butt rolls, slabbed or hogged medium, and treated medium or liners are not acceptable in this grade.

Kraft Bags* consists of baled used kraft bags free from twisted or woven stock and other similar objectionable materials; or of baled brown kraft bags free of objectionable liners or contents; or of baled clean sorted brown kraft papers free from twisted or woven stock, sewn edges and heavy printing.

*As defined by the Paper Stock Institute of America, "Paper Stock Standards and Practices" Circular PS-74.

Kraft Cuttings* consists of baled new colored kraft cuttings, sheets and bag waste, free of sewn or stitched papers; or of baled new unprinted brown kraft cuttings or sheets entirely free from sewn edges, twisted or woven stock; or of new brown kraft cuttings and sheets, including misprint bags. Stitched or sewn papers are not acceptable in this grade; or of baled new unprinted brown kraft envelope cuttings or sheets.

Groundwood Substitutes* consists of baled trim of magazines, catalogs and similar printed matter, not limited with respect to groundwood or coated stock, and may contain the bleed of cover and insert stock as well as beater-dyed papers and solid color printing; or of baled unprinted cuttings or sheets of white coated or filled white groundwood content paper; or of baled trim of magazines, catalogs and similar printed matter. It may contain the bleed of cover and insert stock to a maximum of 10% of dark colors, and must be made from predominantly bleached chemical fibre. Beater-dyed papers may not exceed 2%. Shavings of novel news or newsprint grades may not be included in this packing.

Groundwood Substitutes (uncoated)* consists of baled trim of magazines, catalogs and similar printed matter free from beater-dyed papers, and may not contain over 5% of solid color printing; or of baled unprinted cuttings and sheets of white newsprint paper or other papers of white groundwood quality, free of coated stock; or of baled unprinted cuttings or sheets of white newsprint of uniform brightness and quality, free of coated stock; or of bleached sulphite or sulphate papers, printed or unprinted in sheets, shavings, guillotined books, or quire waste. A small percentage of papers containing fine groundwood adulteration may be included.

White Shavings* consists of baled shavings and sheets of all-white sulphite printing papers, free from printing. This grade may contain sulphite and sulphate papers having a small percentage of groundwood; or of baled shavings and sheets of all-white sulphite and sulphate printing papers of reasonably uniform brightness free from printing, but may contain not more than 5% of coated papers; or of baled shavings or sheets of all untreated white bond ledger or writing papers. Must be free from printing and groundwood; or of baled envelope cuttings or sheets of untreated hard white papers free from printing and groundwood; or of baled cuttings of sheets of untreated white envelope papers of reasonably uniform brightness free from printing, groundwood and coated stock.

Colored Ledger* consists of baled untreated colored envelope cuttings, shavings or sheets of bleachable colored papers, predominantly sulphite or sulphate, free from all printing; or of sheets and side trim of new printed or unprinted colored or white sulphite or sulphate papers such as used in the manufacturing of manifold forms, continuous forms, register forms, and similar printed papers.

*As defined by the Paper Stock Institute of America, "Paper Stock Standards and Practices" Circular PS-74.

Those forms used once for machine data processing may be included. All stock must be untreated and uncoated; or of printed or unprinted sheets, shavings, and cuttings of colored or white sulphite or sulphate ledger, bond, writing, and other papers which have a similar fibre and filler content. This grade must be free of treated, coated, padded, or heavily printed stock.

Tab Cards (and other semi-bleached pulp substitutes)* consists of baled envelope cuttings, shavings or sheets of manila-colored papers predominantly sulphite or sulphate, free from all printing; or of baled cuttings and sheets of untreated sulphite or sulphate papers free from printing; or of printed manila-colored cards, predominantly sulphite or sulphate, which have been manufactured for use in tabulating machines. This grade may contain manila-colored tabulating cards with tinted margins.

Colored Kraft Substitutes* consists of printed colored or manila cards predominantly sulphite or sulphate which have been manufactured for use in tabulating machines. Unbleached kraft cards are not acceptable; or of misprint sheets and printed cartons of bleached sulphate free from wax, greaseproof lamination, gilt, and inks, adhesives or coatings that are non-soluble.

White Ledger* consists of printed or unprinted sheets, shavings, and cuttings of white sulphite or sulphate ledger, bond writing, and other papers which have a similar fibre and filler content. This grade must be free of treated, coated, padded, or heavily printed stock; or of sheets and side trim of new printed or unprinted white sulphite or sulphate papers such as are used in the manufacturing of manifold forms, continuous forms, register forms, and similar printed papers. Those forms used once for machine data processing may be included. All stock must be untreated and uncoated.

Bleached Pulp Substitutes* consists of printed bleached sulphate cuttings free from misprint sheets, printed cartons, wax, greaseproof lamination, gilt, and inks, adhesives or coatings that are non-soluble; or of unprinted bleached sulphate cuttings, sheets or rolls free from any printing, wax, greaseproof lamination or adhesives or coating that are non-soluble.

Specialty Grades* are as follows:

1-S White Waxed Cup Cuttings
2-S Printed Waxed Cup Cuttings
3-S Plastic Coated Cups
4-S Polycoated Bleached Kraft - Uncoated
5-S Polycoated Bleached Kraft - Printed
6-S Polycoated Milk Carton Stock
7-S Polycoated Diaper Stock
8-S Polycoated Boxboard Cuttings
9-S Waxed Boxboard Cuttings
10-S Boxboard Cuttings Containing Foil

*As defined by the Paper Stock Institute of America, "Paper Stock Standards and Practices" Circular PS-74.

Specialty Grades* - Continued

11-S Waxed Corrugated Cuttings
12-S Wet Strength Corrugated Cuttings
13-S Asphalt Laminated Corrugated Cuttings
14-S Beer Carton Waste
15-S Kraft Carrier Cuttings, Wet Strength Treated
16-S White Wet Strength Waste
17-S Brown Wet Strength Waste
18-S Printed and/or Colored Wet Strength Waste
19-S White Glassine
20-S Chocolate Glassine
21-S Red Glassine
22-S Printed and/or Mixed Colored Glassine
23-S Flyleaf Shavings Containing Hot Melt Glue
24-S Manifold Ledger Containing Carbon Paper
25-S Books with Covers
26-S Manila and Colored Tabulating Cards in small boxes on skids, unsorted (rubber bands, clips, and correction stickers not removed; percentage of manila cards to be predetermined by buyer.)

*As defined by the Paper Stock Institute of America, "Paper Stock Standards and Practices" Circular PS-74.

Mill: PLAINWELL PAPER CO.,INC Location: Plainwell, Michigan

B. Products. (continued)	Average Daily Air Dry* Tons/day	Maximum Day Air Dry* Tons/day	Maximum Mont Air Dry* Tons/day
22. Recycled Paperboard			
a. Linerboard	NA	NA	NA
b. Corrugating	NA	NA	NA
c. Chip & Filler Board	NA	NA	NA
d. Folding	NA	NA	NA
e. Set-Up	NA	NA	NA
f. Gypsum Wall Board	NA	NA	NA
g. Other _____	NA	NA	NA
23. Construction Paper and Board			
a. Construction Paper	NA	NA	NA
b. Wet Machine Board	NA	NA	NA
c. Insulating Board	NA	NA	NA
d. Hard Pressed Board	NA	NA	NA
e. Other _____	NA	NA	NA

*Measured at the winder or pulp dryer.

B. Chemicals and Other Raw Materials

The following list of purchased chemicals and raw materials should be used to indicate their use in the mill process and/or process maintenance work. If a chemical is used, please circle the appropriate answer. Two answers should be marked for each numbered chemical or raw material used. The following answers are possible: (a) Mill process chemical; (b) Used for process maintenance work; (c) More than 500 lb/year is used; (d) Less than 500 lb/year is used. For some chemicals, a third answer may be marked. For chemicals applied to the surface of the formed paper, mark answer (e) surface application. If (e) is not marked the chemical will be assumed to be used internally (combined with the stock) unless the specific type of chemical would indicate otherwise (i.e., cleaners and detergents).

Adhesives

26. Animal Glue
(a) (b) (c) (d) (e)

27. Casein
(a) (b) (c) (d) (e)

28. Polyvinyl Acetate
(a) (b) (c) (d) (e)

29. Starch
(a) (b) **(c)** (d) **(e)**

30. Styrene-Butadiene
(a) (b) (c) (d) (e)

Other

31. __________
(a) (b) (c) (d) (e)

32. __________
(a) (b) (c) (d) (e)

33. __________
(a) (b) (c) (d) (e)

34. Alum
(a) (b) **(c)** (d) (e)

35. Ammonia
(a) (b) **(c)** (d) **(e)**

36. Ammonium Hydroxide
(a) (b) (c) (d) (e)

37. Amorphous Waxes
(a) (b) (c) (d) (e)

38. Asphalt
(a) (b) (c) (d) (e)

39. Binder
(a) (b) (c) (d) (e)

**** Bituminous Material
(list trade names)

40. __________
(a) (b) (c) (d) (e)

41. __________
(a) (b) (c) (d) (e)

Boil-Out Materials
(list trade name)

42. Texo 915
(a) **(b)** (c) **(d)** (e)

43. __________
(a) (b) (c) (d) (e)

44. __________

45. Bronze Powders
(a) (b) (c) (d) (e)

46. Chlorine
(a) (b) **(c)** (d) (e)

47. Chlorine Dioxide
(a) (b) (c) (d) (e)

*** Bituminous Materials

We do not use Bituminous materials in the process of production or maintenance as such. We do use coal to fire our boiler plant for our source of steam power. Part of this waste "flyash" collected from our flyash collection system ends up

Plainwell, Michigan

Mill: Plainwell Paper Co.

Location: Plainwell, Michigan

Chemicals and Other Raw Materials (Cont'd.)

(a) Mill process chemical; (b) Used for process maintenance work; (c) More than 500 lb/year used; (d) Less than 500 lb/year used; (e) Surface application

Cleaners & Detergents
(list trade names)

48. Texo 1055
(a) (b) (c) (d) (e)

49. ____
(a) (b) (c) (d) (e)

50. ____
(a) (b) (c) (d) (e)

Coating Adhesive
(list types)

51. Protein
(a) (b) (c) (d) (e)

52. Starch
(a) (b) (c) (d) (e)

53. ____
(a) (b) (c) (d) (e)

54. Crystalline Waxes
(a) (b) (c) (d) (e)

Cutting Fluids
(list types)

55. ____
(a) (b) (c) (d) (e)

56. ____
(a) (b) (c) (d) (e)

Defoamers
(list trade names)

58. NOPCO DF 177
(a) (b) (c) (d) (e)

59. NOPCO DF 122
(a) (b) (c) (d) (e)

60. Foamaster SRG
(a) (b) (c) (d) (e)

Degreasers
(list trade names)

61. Texo 127
(a) (b) (c) (d) (e)

62. Texo 7
(a) (b) (c) (d) (e)

63. Zepp 300
(a) (b) (c) (d) (e)

Dispersants
(list trade names)

64. Dispex 40
(a) (b) (c) (d) (e)

65. TSPP
(a) (b) (c) (d) (e)

66. Calgon T
(a) (b) (c) (d) (e)

Dyes (list types)

67. Direct
(a) (b) (c) (d) (e)

68. Acid
(a) (b) (c) (d) (e)

69. Pigment
(a) (b) (c) (d) (e)

Fillers

70. Diatomaceous Earth
(a) (b) (c) (d) (e)

71. Clay
(a) (b) (c) (d) (e)

72. Calcium Carbonate
(a) (b) (c) (d) (e)

73. Talc
(a) (b) (c) (d) (e)

74. TiO_2
(a) (b) (c) (d) (e)

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Mill: PLAINWELL PAPER CO., INC Location: Plainwell, Michigan

B. Products (continued)	Average Daily Air Dry* Tons/day	Maximum Day Air Dry* Tons/day	Maximum Mont Air Dry* Tons/day
17. Specialty Packaging and Industrial Converting			
a. Tape Backing	NA	NA	NA
b. Saturating	NA	NA	NA
c. Gasket	NA	NA	NA
d. Other (please list)			
Release Base	53.07	160.1	93.5 Est
Conductive Base	16.45	79.2	26.0 Est
Specialty & Gen. Ind. Grades	9.98	80.0	UK
18. Sanitary Tissue	NA	NA	NA
19. Unbleached Kraft Paperboard (80% or more unbleached Kraft pulp)			
a. Linerboard	NA	NA	NA
b. Folding	NA	NA	NA
c. Other _____	NA	NA	NA
20. Semi-Chemical Paperboard (75% or more semi-chemical pulp)			
a. Corrugating	NA	NA	NA
b. Other _____	NA	NA	NA
21. Bleached Paperboard (not less than 80% bleached chemical wood pulp)			
a. Clay Coated Bleached Food Board	NA	NA	NA
b. Uncoated Bleached Food Board	NA	NA	NA
c. Bleached Linerboard	NA	NA	NA
d. Folding	NA	NA	NA
e. Other _____	NA	NA	NA

*Measured at winder or pulp dryer.

Mill: PLAINWELL PAPER CO.,INC Location: Plainwell, Michigan

D. Direct Discharger please provide the following information:

228. Is wastewater discharge continuous or non-continuous (effluent stored and discharged when receiving water conditions allow) when production facilities are operating?

(a) Continuous

(b) Non-continuous - daily

(c) Non-continuous - seasonally/intermittent

E. Preliminary Treatment (Direct Discharger)

230. Give the preliminary treatment method used, if any.

(a) Neutralization

(b) Screening (indicate type used) Bar Screen removeds trash from effluent

(c) Other (please describe) Polymer Addition

F. Primary Treatment (Direct Discharger)

232. Indicate the method used for primary treatment.

(a) Clarifier

(b) Sedimentation lagoon

(c) Mechanically cleaned sedimentation lagoon

(d) Other (please describe) _____

G. Biological Treatment (Direct Discharger)

236. Give the type of biological treatment used.

(a) Storage oxidation basin

(b) Aerated stabilization basin

(c) Activated sludge (air or oxygen)

(d) Other (please describe) _____

Mill: Plainwell Paper Co.,Inc. Location: Plainwell, Michigan

H. Secondary Solids Removal

237. If secondary clarification is used, what is the method used?

(a) Clarifier

(b) Reactor clarifier

(c) Settling basin

(d) Other (please indicate) _____

238. Is a holding pond utilized after secondary treatment?

(a) Yes

(b) No

I. Spray Irrigation

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

J. Sludge Handling and Disposal

240. Indicate the method used for sludge disposal.

(a) Lagooning

(b) Landfill

(c) Hog fuel boiler

(d) Other (please describe) _____

K. Foam Control

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

L. Cost Information

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

Mill: Plainwell Paper Co., Inc Location: Plainwell, Michigan

M. Site Conditions and Availability of Land

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

N. Wastewater Characteristics

251-254. Give the (1976) wastewater loads indicated below:

	Indirect and Direct Dischargers Please Answer		Direct Discharg Only Please Answer	
	(251)	(252)	(253)	(2
	Paper Mill	Total Raw Wastewater	Secondary Treatment System Effluent	Fin Effl
a. Flow, MGD				
(1) Average Day	2.50 Est	1.62	1.60	1.6
(2) Maximum Day	3.0 Est	2.76	2.72	2.7
(3) Maximum Month	2.65	1.77	1.73	1.7
b. BOD, lbs/day				
(1) Average Day	2522 Est	2518	800	800
(2) Maximum Day	7238 Est	7229	2492	249
(3) Maximum Month	3561 Est	3555	1060	106
c. TSS, lbs/day				
(1) Average Day	10,419	10,409	643	643
(2) Maximum Day	77,318	77,310	2985	2985
(3) Maximum Month	15,686	15,670	951	951

IV. FUEL AND ENERGY

NO QUESTIONS FOR THIS SECTION ARE TO BE ANSWERED IN PART I.

VII. PRIORITY POLLUTANTS

See Next Page

VIII. PROCESS SCHEMATICS

NO QUESTIONS FOR THIS SECTION ARE TO BE ANSWERED IN PART I.

Addendum - No C.O.D. data available for this time period

Mill: Plainwell Paper Co.

Location: Plainwell, Michigan

Chemicals and Other Raw Materials (Cont'd.)

(a) Mill process chemical; (b) Used for process maintenance work; (c) More than 500 lb/year used; (d) Less than 500 lb/year used; (e) Surface application.

Other

75. Soldium Silico Aluminate
(a) (b) (c) (d) (e)

76. _____
(a) (b) (c) (d) (e)

77. _____
(a) (b) (c) (d) (e)

Fungicides
(list trade names)

78. _____
(a) (b) (c) (d) (e)

79. _____
(a) (b) (c) (d) (e)

80. _____
(a) (b) (c) (d) (e)

81. Hydrogen Peroxide
(a) (b) (c) (d) (e)

82. Oil Base Ink
(a) (b) (c) (d) (e)

83. Water Base Ink
(a) (b) (c) (d) (e)

Latex (list types)

84. Styrene Butadiene
(a) (b) (c) (d) (e)

85. Poly Vinyl Acetate
(a) (b) (c) (d) (e)

86. _____
(a) (b) (c) (d) (e)

87. Lime
(a) (b) (c) (d) (e)

88. Limestone
(a) (b) (c) (d) (e)

89. Magnesium Hydroxide
(a) (b) (c) (d) (e)

90. Magnesium Oxide
(a) (b) (c) (d) (e)

91. Oils
(a) (b) (c) (d) (e)

Organic Solvents

92. Alcohols
(a) (b) (c) (d) (e)

93. Esters
(a) (b) (c) (d) (e)

94. Ketones
(a) (b) (c) (d) (e)

Other

95. _____
(a) (b) (c) (d) (e)

96. _____
(a) (b) (c) (d) (e)

97. _____
(a) (b) (c) (d) (e)

Pigments

98. Cadmium Types
(a) (b) (c) (d) (e)

99. Chromium Types
(a) (b) (c) (d) (e)

100. Copper Types
(a) (b) (c) (d) (e)

101. Lead Types
(a) (b) (c) (d) (e)

102. Luminescent Types
(a) (b) (c) (d) (e)

103. Mercury Types
(a) (b) (c) (d) (e)

Mill: Plainwell Paper Co Location: Plainwell, Michigan

Chemicals and Other Raw Materials (Cont'd.)

(a) Mill process chemical; (b) Used for process maintenance work; (c) More than 500 lb/year used; (d) Less than 500 lb/year used; (e) Surface application.

104. Organic Types
(a) (b) (c) (d) (e)

105. Zinc Types
(a) (b) (c) (d) (e)

Other

106. _____
(a) (b) (c) (d) (e)

107. _____
(a) (b) (c) (d) (e)

108. _____
(a) (b) (c) (d) (e)

Plasticizers (list types)

109. Calcium Stearate
(a) (b) (c) (d) (e)

110. _____
(a) (b) (c) (d) (e)

111. _____
(a) (b) (c) (d) (e)

Polymers

112. Cellulose Acetate
(a) (b) (c) (d) (e)

113. Cyclized Rubber
(a) (b) (c) (d) (e)

114. Ethyl Cellulose
(a) (b) (c) (d) (e)

115. Nitrocellulose
(a) (b) (c) (d) (e)

116. Polyethylene
(a) (b) (c) (d) (e)

Other

117. Organic Polycationic
(a) (b) (c) (d) (e)

118. _____
(a) (b) (c) (d) (e)

119. _____
(a) (b) (c) (d) (e)

Preservatives

120. Borax
(a) (b) (c) (d) (e)

121. Formaldehyde
(a) (b) (c) (d) (e)

122. Glyoxal
(a) (b) (c) (d) (e)

Other

123. _____
(a) (b) (c) (d) (e)

124. _____
(a) (b) (c) (d) (e)

125. _____
(a) (b) (c) (d) (e)

126. Resins (wet strength)
(a) (b) (c) (d) (e)

Resins (other)
(list types)

127. _____
(a) (b) (c) (d) (e)

128. _____
(a) (b) (c) (d) (e)

129. _____
(a) (b) (c) (d) (e)

130. Rosin Size
(a) (b) (c) (d) (e)

131. Salt or Brine
(a) (b) (c) (d) (e)

132. Salt Cake
(a) (b) (c) (d) (e)

Mill: Plainwell Paper Co., Inc. Location: Plainwell, Michigan

III. PROCESS RAW MATERIALS

A. Total Mill Fiber Supply -- Please provide the average tons/day for the year and quarters indicated below:

		1976 Quarter			
		1st	2nd	3rd	4th
24.	Wastepaper				
a.	Mixed Wastepaper	NA	NA	NA	NA
b.	Boxboard Cuttings	NA	NA	NA	NA
c.	No. 1 News	NA	NA	NA	NA
d.	Special News	NA	NA	NA	NA
e.	Fibre Containers	NA	NA	NA	NA
f.	Corrugated	NA	NA	NA	NA
g.	Corrugated Cuttings	NA	NA	NA	NA
h.	Kraft Bags	NA	NA	NA	NA
i.	Kraft Cuttings	NA	NA	NA	NA
j.	Groundwood Substitutes (coated)	NA	NA	NA	NA
k.	Groundwood Substitutes (uncoated)	NA	NA	NA	NA
l.	White Shavings	NA	NA	NA	NA
m.	Colored Ledger	NA	NA	NA	NA
n.	Tab Cards	1.36	NA	6.51	NA

Mill: Plainwell Paper Co., Inc.

Location: Plainwell, Michigan

	1976 Quarter			
	1st	2nd	3rd	4th
o. Colored Kraft Substitutes	NA	NA	NA	NA
p. White Ledger	NA	NA	NA	NA
q. Bleached Pulp Substitutes	NA	NA	NA	NA
r. Specialty Grades	NA	NA	NA	NA
s. Other				
	NA	NA	NA	NA
25. Other				
NA	NA	NA	NA	NA

Chemicals and Other Raw Materials (Cont'd.)

(a) Mill process chemical; (b) Used for process maintenance work; (c) More than 500 lb/year used; (d) Less than 500 lb/year used; (e) Surface application.

Slimicides (Biocides) (list trade names)

113. BETZ RX - 29
(a) (b) (c) (d) (e)

114. BETZ RX - 39
(a) (b) (c) (d) (e)

115. BETZ RX 26 AND 32
(a) (b) (c) (d) (e)

116. Sodium Bisulfite
(a) (b) (c) (d) (e)

117. Sodium Aluminate
(a) (b) (c) (d) (e)

118. Sodium Carbonate
(a) (b) (c) (d) (e)

119. Sodium Chlorate
(a) (b) (c) (d) (e)

120. Sodium Hydrosulfite
(a) (b) (c) (d) (e)

121. Sodium Hydroxide
(a) (b) (c) (d) (e)

122. Sodium Silicate
(a) (b) (c) (d) (e)

123. Sodium Sulfide
(a) (b) (c) (d) (e)

144. Sodium Sulfite
(a) (b) (c) (d)

145. Sulfur
(a) (b) (c) (d) (e)

146. Sulfur Dioxide
(a) (b) (c) (d) (e)

147. Sulfuric Acid
(a) (b) (c) (d) (e)

148. Synethetic Size
(a) (b) (c) (d) (e)

149. TSPP
(a) (b) (c) (d) (e)

150. Varnish
(a) (b) (c) (d) (e)

Varnish Remover (list trade names)

151. _____
(a) (b) (c) (d) (e)

152. _____
(a) (b) (c) (d) (e)

153. _____
(a) (b) (c) (d) (e)

Washing Aids (list types)

154. MURIATIC ACID
(a) (b) (c) (d) (e)

155. SULFURIC ACID
(a) (b) (c) (d) (e)

156. _____
(a) (b) (c) (d) (e)

157. Zinc Hydrosulfite
(a) (b) (c) (d) (e)

Other

158. Styrene Maleic Anhrdride
(a) (b) (c) (d) (e)

159. _____
(a) (b) (c) (d) (e)

160. _____
(a) (b) (c) (d) (e)

161. _____
(a) (b) (c) (d) (e)

162. _____
(a) (b) (c) (d) (e)

163. _____
(a) (b) (c) (d) (e)

164. _____
(a) (b) (c) (d) (e)

Mill: Plainwell Paper Co. Location: Plainwell, Michigan

IV. MANUFACTURING PROCESS AND INTERNAL POLLUTION CONTROL PRACTICES

A. General

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

B. Paper Mill

182. How many paper machines does mill have?

Three

183. Give the number of paper machines the mill has which utilize savealls, or similar devices, for fiber recovery.

Three

184. Give the number of paper machines the mill has which have savealls, or similar devices, that permit reuse of clarified water.

Three - See Attached

C. Additional Information

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

Addendum - Item 184

All three of our paper machines reuse some of the water from savealls. We are attempting to reuse a larger amount of this clarified water.

MILL: Plainwell Paper Co., Inc Location: Plainwell, Michigan

V. WATER USAGE AND EFFLUENT TREATMENT PRACTICES

Instructions for Completing Section V

Section V requests information on the mill's wastewater treatment practices. In Section VIII a general schematic of the effluent treatment system is requested. You have the option of providing any of the data requested in Section V on the schematic. If you do this, please indicate on the question(s) involved that the data is presented on the schematic.

A. Water Usage

NO QUESTIONS FOR THIS ITEM ARE TO BE ANSWERED IN PART I.

B. Background Data

211. Indicate the method(s) of disposal of the mill wastewater.

(a) Direct

(b) Indirect

(c) Self-contained

(d) Other (please describe) _____

212. Please give the year in which the following portions of the mill's existing wastewater treatment system were started up.

	Year of Startup
a. Primary Treatment System	1954
b. Secondary Treatment System	1967

C. Indirect Discharger (discharge to a POTW) please provide the following information:

215. Is raw wastewater pretreated externally prior to discharge to the POTW? (Pretreatment is considered to be any treatment device external from the mill production processes which is utilized prior to a primary and secondary treatment system, or prior to discharge by an indirect discharger to a POTW.)

(a) Yes

(b) No

MIII: Plainwell Paper Co. Inc. Location: Plainwell, Michigan

216. Give the treatment process used by the POTW to which your mill discharges. (Include biological and physical-chemical treatment if applicable)

(a) Activated sludge

(b) Aerated lagoon

(c) Oxidation ditch

(d) Trickling filter

(e) None

(f) Other (indicate type) _____

219. Give the preliminary treatment method used, if any.

(a) Neutralization

(b) Screening (indicate type used) Bar Screen Removes trash from effluent.

(c) Other (please describe) Polymer Addition

221. Indicate the primary treatment method used, if applicable.

(a) Clarifier

(b) Sedimentation lagoon

(c) Mechanically cleaned sedimentation lagoon

(d) Other (please describe) _____

(e) Not applicable

225. Give the type of biological treatment used, if applicable.

(a) Storage oxidation basin

(b) Aerated Stabilization basin

(c) Activated sludge (air or oxygen)

(d) Other (please describe) _____

(e) Not applicable